Man Is Just Getting Acquainted with Finny Denizens of Deepest Deep

From a Thousand Feet Down and More, the Dredges of the Coquet and Other Trawlers Bring Up Quaint Creatures, Some of Which May Tickle the Palate of the Human Kind.

But Way Down in the Constant Cold and Dark, Where the Chances of Their Capture Are Slim, Dwell Other Animate Things, Often Grotesque or Monstrous, Which Seldom Reach the Surface.

THE other day a gray hulled vessel, 110 feet long, with decks as barren of non-utilitarian gear as a torpedo boat destroyer at the end of a four hours' speed trial, swung into New York Harbor and turned her high bow into the slip at the foot of Fulton street used by the fishing boats. She was the Scotch steam trawler Coquet. In one sense alone did the name fit the businesslike craft. It was the first visit to this port of a steam trawler flying the British flag, and of the type which drew the fire of the Russian naval fleet when crossing the North Sea on its way to Tsushima Strait and its own destruction. She, if one may continue to apply the feminine to such a roughly-featured craft, had come here to coquet with the fish market. In the holds were tons of fish, taken up from the depths of the sea.

There are fishes and fishes. There are those which are caught near the surface. There are others that come up from the depths. The Coquet, with her powerful winches operated by steam and her shrewd, observant, resourceful Scotch commander, can get the deep sea fishes. The fact that this vessel could take up such fishes and was in the habit of dredging along the bottom, sometimes a thousand feet below the surface, for edible fishes added to the interest in the visit of the grimy and powerful fishing boat to this port.

In truth, one thousand feet is not a great depth from which to bring up fishes, although, doubtless, there are few from a greater depth which are edible. Men are just discovering what a wonderful and interesting life is lived away down in the valleys and on the great plains three or four miles below the choppy surface of the water over which the transatlantic liners glide.

It is a dark world. It is known that light penetrates in all the colors of the solar spectrum to a depth of not more than three hundred feet, and the ultra violet rays, undistinguishable to the human eye, have been detected by the use of photographic plates at a depth of three thousand feet. Beyond this, the presence of light derived from the sun's rays has not been discovered after photographic exposures hours in duration. Therefore, in this world which never sees the light of day, which is darker than any night the human eye ever attempted to pierce, some of the fish are blind, while others, fitted with large round or telescopic eyes, go swimming about like burglars with dark lanterns in their hands, figuratively speaking. Many of them are equipped with organs by means of which they can illuminate the surrounding waters at will.

Different fishes have their illuminating apparatus in different parts of the body. Some have them arranged in double rows along their sides, like portholes on a passenger steamship. When they pass each other in the darkness with all their lights ablaze they remind one of ships passing in the night. Doubtless, for reasons which will appear shortly, if they come up with lights going at full candle power, they do not pass, or if they do pass they do not have the current turned on. Others have headlights, while a deep sea relative of the angler carries a little light hung on the end of a fish pole, which he flourishes around over his head as an invitation to other fishes to illustrate in deep sea ways the parable of the candle and the moth. As the fancy hues of an Easter hat would not be noticed by them in the darkness, Nature, who usually has a reason for everything, has provided them all with black coats. They all look alike in the darkness. Moreover, no submarine creature swimming above can see them in the great, black abyss below.

It is a cold world, a world where the waters border on the freezing line regardless of latitude. So far as temperature is concerned it is immaterial to the fish whether he be in the tropics or in the arctic regions. It is all one to him. The chill of a room in a Roman pension in midwinter must be his the year around. There are no mitigating circumstances, unless he is a young eel bound upward to the fresh water fields where his ancestors browsed.

EURYPHARYNX PELECANOIDES HAS MORE MOUTH THAN STOMACH.

This under water world is a hard world. The fishes that live at a depth of three and a half miles have to resist a pressure of between four and five tons to the square inch. A human being feels uncomfortable when exposed to a pressure of forty or fifty pounds to the square inch, and is in danger. The pressure in the water will break a corked bottle of considerable thickness of glass at a depth of 200 feet. For every thousand feet the pressure increases 500 pounds to the square inch. These deep sea fishes, however, are equipped by structure to meet these conditions. They are of open work construction, so that they can absorb water after the manner of sponges. They have soft, cavernous skeletons, flabby muscles and tender skins. Thus is the pressure equalized within and without.

This condition makes their world a weird sort of place, for things happen there in such a downside up way sometimes. For instance, it may happen that the fishes fall up instead of down when they become the victims of mishaps, such as attempting to swallow too large a fish. The decomposing gases lift them up, up, up to the surface, and then, the pressure of the depths removed from the exterior of their tender frames, they explode. Their eyes pop out. Their tongues are forced out of their mouths and the stomachs follow.

Their queer shapes would almost literally "drive a man to drink." Dr. Townsend, the director of the New York Aquarium, on one occasion was connected with an expedition in search of deep sea forms of life. He had permitted the men on the boat a day off. On the day following their return from shore leave some deep sea dredging was done. One of the men who had enjoyed a run on shore was stationed outboard to assist in getting the trawl with its catch on board. When it came up it contained a lot of long-tailed macrurids, a deep water fish, about thirty inches long. His eye caught the long tails whipping back and forth in large numbers through the meshes. "Good God!" he shouted, "let me out of this. They look too much like snakes to suit me."

A great many of them are eel-like in shape. Some of them have bulbous stomachs. It is the head that is most weird, however. Regarding the features of their heads one could properly comment, as Little Red Riding Hood on the bear: "What great big eyes you've got!" "What a great big mouth you've got!" and "What great big teeth you've got!" Those are noticeable characteristics of their ugly "mugs." Some are serpentlike, with sharp snouts. Some have needlelike jaws. Some have jaws with bags under them, that remind one of the suspensorium of the pelican. Some look as if they had taken the Boston bull terrier's face as a model and come very near equalling it in ugliness. As for teeth, the fishes are very dragons in this respect. If they could answer Little Red Riding Hood's comments they would respond to the spoken wonderment regarding the big teeth in just the words the bear used: "The better to eat you with, my dear." Only they would not have said "my dear," for all the fishes are supposed, down in that chill, dark world of the sea, to be enemies. They would try to gobble each other up without further ado.

There is believed to be no vegetable life below what might be termed the timber line in the valleys of the sea. All of the fishes are supposed to be carnivorous and dependent upon one another for their supplies of sustenance. Life with them is a battle, and the bottom of the ocean a dueling ground. The fishes apparently think nothing of attacking others of their own size, nor do they stop when they find that they have attempted to swallow one a little too large for the stomach. Fishes from the great depths nine inches long have been found with eleven-inch neighbors in their stomachs. These denizens of the deep swallow their food after the manner of the snake. They suck it into their big stomachs.

After all, little is known definitely about the life of this underworld. A few expeditions have lowered their nets and dragged them over the bottom, just as a balloon might do it sailing over the city of Washington or New York at an elevation above those cities as great as the summit of Mount McKinley above the sea. No one has obtained a more complete picture of the bottom of the sea any more than the aeronaut would of Washington from the material he brought up in his dragnet after a night voyage over the city. It is believed that there are many fishes so big and wary and swift that they cannot be taken in the nets now in use.

It cannot be doubted, says one authority, that there are fishlike animals unknown to science which are of great size and which occasionally come to the surface, providing a foundation for such stories as those of the sea serpent.

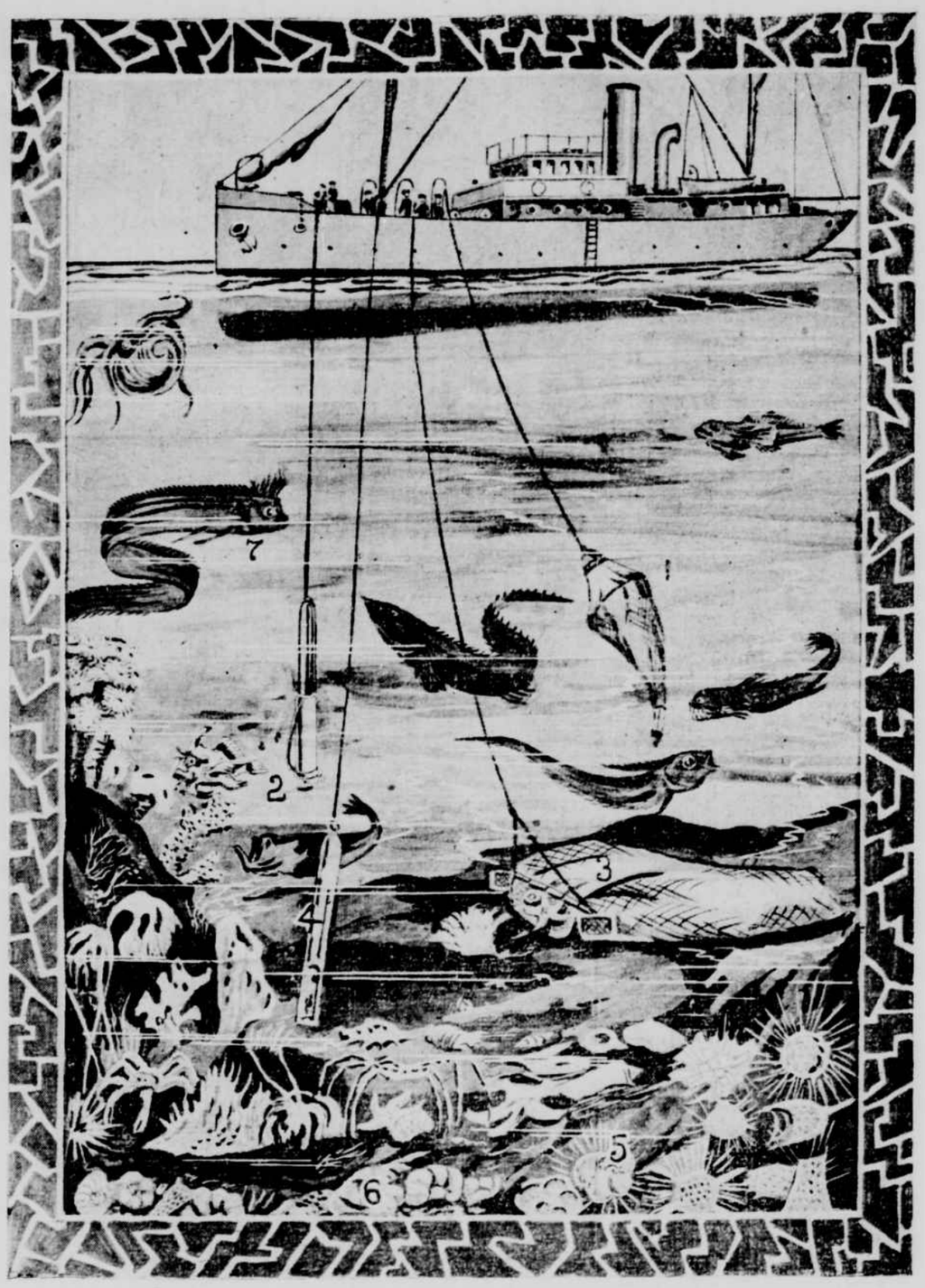
"To appreciate the meagre extent of our knowledge of what is going on in midocean," says this authority, "it is only necessary to think of such a fish as the chiasmodon and its history. The chiasmodon is one of those grotesque looking pelagic fishes, with yawning, flexible jaws and a vastly distensible stomach, which is able to engage other fishes equal or more than equal in size to itself. This practice is naturally attended by disaster, and the chiasmodon, in the event of death, is brought to the surface by the expansion of the gases in its tissues. Such accidents evidently happen very often. The chances were few, nevertheless, that waifs of this kind should fall into the hands of naturalists, yet within forty years a chiasmodon has been found on the surface five times. On the other hand, a chiasmodon, although so abundant, has been taken only once by the deep sea nets.

"Another ocean dweller which exploring ships have not yet discovered is Regalecus (king of the herring), or the oar fish, a serpent shaped, rapidly swimming form, usually from eighteen to twenty-four feet long, which is occasionally stranded on the shore in the stormy season. Within the last 150 years individuals have visited the shores of Norway, Finmark, the Faroe Islands, Scotland, Ireland, England, the Mediterranean, France, Bermuda, the Cape of Good Hope, Hindustan and New Zealand. Forty-four have been reported by naturalists. Its world-wide distribution and the number of waifs give evidence that it is abundant in midocean, yet the exploring ships in all the years of combined searching have found no vestiges of it, old or young.

"Fully one-half of the deep sea forms are now (1895) represented only by single specimens, and many anatomical questions cannot be solved because these uniques may not be sacrificed to dissection. Besides this, the imperfection of the existing specimens is a great drawback. Owing to soft, cavernous skeletons, the flabby muscles, tender skins, deciduous scales and fragile appendages which are characteristic of many of them, they are liable to injury. It has often been found necessary to examine a score or more of individuals in order to be able to appreciate characters which could commonly be made out from a single specimen."

In 1895 it was estimated that there were not many above six hundred specimens of the deep sea fishes known. The number has been considerably extended, but it cannot be said that the world of the air knows much about the inhabitants of that far-down nether world. Fishes provide many mysteries for the detective instinct of the scientist to clear up. The world, for instance, knows something about the salmon's breeding habits, but little, if anything, is known about the habits of that fish after it has gone out to sea from its cradle and until it returns to the rivers to deposit its eggs. The eel, it is known, reverses the operations of the salmon, being born a thousand fathoms, or a mile, below the surface of the sea. It gradually works its way up to the surface, accustoming itself to its new environment; goes up the fresh waterways, as every coast fisherman knows, grows up, and then goes out to sea again. Turning its nose downward, it slowly makes its way back to the stratum of water in which it was born. There it produces its young, never returning to the surface.

If man is looking for fresh worlds to conquer, there is a big opportunity for him at the bottom of the sea.



PICTORIAL DIAGRAM SHOWING VARIOUS KINDS OF TRAWLS USED FOR DEEP SEA FISHING.
No. 1. Nansen's deep sea net. No. 2. Device for collecting samples of water at different depths. No. 3. Trawl that travels over ocean floor on runners, as vessel draws it. No. 4. Device for bringing up sediment from varying depths and also recording temperatures. Nos. 5 and 6. Deep sea animalcula found in the ooze, but highly magnified. No. 7. An oar fish, sometimes mistaken for a sea serpent.

CYEMA ATRUM RESEMBLES A LIVING ARROW.

SACCOPHARYNX FLAGELLUM HAS MORE STOMACH THAN MOUTH.

"Ariane" Is Voice of Emancipated Woman, Says Miss Farrar

Singer Who Will Appear as Blue Beard's Favorite but Indomitable Wife in Dukas's Opera This Week Finds Both Music and Story Beautiful.

NOW it's Miss Geraldine Farrar as psychologist, sociologist and philosopher! Let not the great American public cry out in horror at the desecration of their operatic idol by such long winded epithets. Such words are the inventions of long haired fanatics or musty bookworms, and what do they know of "Our Gerry," the rose of Melrose, the pride of New England! Yet it has been spoken from the lips of none other than Miss Farrar herself, not, perhaps, in so many words, but in an hour's conversation with a Tribune representative who had gone to her to find out what she had to say on Dukas's opera "Ariane et Barbe-Bleu," which is to receive its first American production at the Metropolitan Opera House on Wednesday night of this week.

Miss Farrar is a young woman of decided imagination, of a will and opinion of her own. No one who has ever seen her in one of her parts will doubt this, and the Tribune's representative came away from his interview more than ever impressed with this fact.

When the reporter began on the subject of the new opera the singer showed no hesitancy in her enthusiasm. Her eyes, her voice, her gestures, the very poise of her body radiated it. Butterfly, Nanon, Mimi, even the Goose-Girl were forgotten—it was Maeterlinck and Dukas, Dukas and Maeterlinck. And as we shall see, there was a moral to it all. Truly, Miss Farrar is a daughter of the Puritans!

"The music and the story are beautiful, wonderful," said Miss Farrar, speaking of "Ariane." "I am immersed in it, lost in it. I now feel sure that it will be a success, though I was not so sure when I began to study it. The story is so human, it will touch the heart of each one of us, even though the story is laid in the dim past and our childhood's Bluebeard and his wives are the protagonists. But then it is such a different Bluebeard, and one wife, the one I am to interpret, is such a different wife!

"The music, too, is very beautiful. It is true that it is influenced by De Bussy, whose wonderful atmospheric orchestration we know so well in his setting of Maeterlinck's other play, 'Pelleas et Melisande,' but there is a melodic line in Dukas that Debussy lacks. It has all of the older composer's mysticism, his quality of things seen as through a veil, with an added virility and, when needed, a definition of outline. The public, I am sure, will feel this, and it will go far to make the music popular.

"But perhaps the greatest appeal to the opera is in its story, for it is a story that touches the lives of nearly all of us alike, poor or rich, humble or exalted. In fact, it is the voice of the emancipated woman"——

"The suffragette?" interjected the interviewer.

"Not at all," was the quick reply. "simply the woman who has come to realize that she, too, has a sphere in this world; that she is not a mere bauble for man's amusement. Ibsen gave voice to this feeling in his Nora in 'A Doll's House,' and now Maeterlinck has added his testimony to the question. You know I take the part of Bluebeard's sixth wife, who dares to open the forbidden door with the golden key and who finds the other five wives alive, but in darkness. They need not have remained so, because there was a ray of light in their dungeon that would have led them to freedom. Yet they stayed where they had been placed by their lord and master simply because they had not the initiative nor the courage to fight their way toward the light and freedom.

"Even when they are released they choose to stay with their cruel husband. Ariane alone leaves him, not in anger but in infinite pity at his own blindness. Bluebeard in the end loves and respects only the one who had dared to defy him and leave him. Maeterlinck may be a dreamer, but he surely knows the souls of men and women.

"So the play is symbolic. Bluebeard is the old-fashioned man who regards women as his slaves, and the five wives are the old-fashioned woman who is happy in being regarded as such. Ariane is the emancipated woman, the woman who has learned to think for herself, who has come to respect herself. The golden key is the key of her knowledge, the knowledge that is to admit woman into her kingdom of the future. So do you wonder that I have grown to love this work, for it is not only a beautiful opera that I am singing, but it is a lesson that I am imparting to those—and there are unfortunately still many—who need it."

So Miss Geraldine Farrar stands forth as a champion of her sex. The blood of the New England abolitionists flows in her veins, too.

"You see," she continued, "I believe that in marriage a man and a woman should give and receive in equal proportion. Each has a share, not the same, but each equal to the other. Women are realizing this, and it is because of this realization that they are not willing to marry the first comer, as was the old-fashioned woman. Yet I believe that women should marry, only that men should be taught that there are two sexes, each of which has its rights.

"Yet I myself never expect to marry—at least for a long while. This is because I do not think an artist has any right to marry. Her art, if she is to succeed, must be all to her, and this would not be fair to her husband. Her interests cannot be divided. Art makes a person self-centred. It cannot help doing so. And marriage means a community, a diversity, of interests. Of course, there are exceptions. We all know of great artists who have married, and have had children, and have been happy, but these are the rare exceptions.

"Yet I believe that motherhood is the highest glory of a woman. And what a mother I have! With a good mother no girl ever need marry. My mother has been everything in the world to me. You see, after all, I am very old-fashioned in my ideas, at least in many of them. For instance, I am continually asked if in order for an artist to express certain emotions it is not necessary for her to have lived them. Such a doctrine, let alone its danger, is ridiculous. Any girl with brains and a good imagination can learn to express anything. Debauchery destroys the very sensitiveness of feeling that is so necessary for an artist.

"I know there are certain people who believe that she should taste of every sensation; yet this want of balance destroys the very effect at which they aim. Now, take the French. They are accused of all sorts of debaucheries; yet, do you know that the Frenchmen who do things are really among the cleanest lived men in the world? Paris puts on her gewgaws and parades her wickedness, not for the French, but for the foreigners. I know Paris, and yet I can say that, to me, New York is a far faster city in most respects.

"It is not necessary to have lived in order to express. No! A thousand times no! How many wrecks have been caused by this doctrine! I know of dozens of cases myself of young girls who have taken up the artistic life, who have been blinded by its glamour, who have slipped and have gone tumbling down into oblivion. People who preach this doctrine don't know what harm they are doing. Of course, one must not shut one's self up in, one's skin—one must not live as if the world did not exist. One must observe and reflect, but this does not mean rolling in the mire.

"Thank God, I am from New England, and have back of me generations of Puritan ancestors. It has given me a will and, I think, some sense. It has allowed me to keep the respect of people, and, after all, the respect of one's fellow men and women is worth more than anything else in the world. What an artist needs is character—character, above anything else. Of course, here again there have been exceptions, but to follow these exceptions to most of us would mean ruin.

"Yet I don't think that I am narrow. For instance, I believe strongly in divorce, just as Ariane believed in it. It is preposterous that a man and a woman who detest each other should be linked together for life—always excepting, of course, that they have children. A couple who have children cannot separate from each other so lightly."

So spoke Miss Farrar, psychologist, sociologist and philosopher, who is to sing "Ariane et Barbe-Bleue" for the joy that is in it and because it is an epistle to the Philistines. It is unique among operas—it bears a moral lesson. Surely this is happiness indeed for a child of New England!

MISS GERALDINE FARRAR.

AN ENGINEER OF RECIPROCITY.

A quondam office boy is negotiating with us Canada's end of all this vexed reciprocity business. This self-made person, W. S. Fielding, Finance Minister of the Dominion, after beginning his career in the aforementioned calling at the age of sixteen, became an editorial writer when twenty, head editor of a big Halifax daily when twenty-seven, and Prime Minister of Nova Scotia when thirty-six.

The Average Jest Has a Long Career and Is a Great Traveller

A Really Funny Idea Lives and Grows in Countless Forms.

"A really funny idea," says Irvia S. Cobb in "Everybody's Magazine," "has a long, long life and a merry one. I've known funny ideas that had grown sixteen rattles and a button, and were still wagging along steadily. The joke lasts; it's the poor fellow who first thought it up that wears out. A humorist working by the day at Denver, we will say, has a funny idea. It's a bully funny idea. It comes to him like a bolt from the blue. He's mooning along without a cloud in the sky or a leaf stirring, and all of a sudden—bang! there is the idea sloshing around in his brain, making trouble for the old settler ideas that have been there all along. It is a noble and a precious and a priceless thing, and he figures he ought to get as much as 75 cents for it. So he clutches the newborn treasure to his bosom and runs to the office and commits it to paper while it's still pink and palpitating. An editor lances it in a vital spot with a pencil and drains a little of the lifeblood out of it. A printer intersperses a typographical error here and there where it will do the most harm. A proofreader has his little fling at it, and finally, in a crippled but still attractive state, it sees the garish light of day and takes its foot in its hand and starts on its travels.

"A paragrapher in Houston packs it down into a line. A versifier in Duluth stretches it into a jingle and sells it to a comic weekly with a large tonsorial parlor and day coach circulation. The man who writes the syndicate theatrical letter for the Sunday papers turns it into a bit of repartee and says Willie Collier said it at The Lambs to Wilton Lackaye in the presence of John Drew, William Gillette and Al H. Wood, all of whom laughed heartily. By turns it is an anecdote, a bon mot, an after-dinner speech, an end man's means of visible support, a popular song, an apt retort, a catch line, a space filler, a set of verses, a slogan and a parody.

"Thus, in easy stages, it reaches New York. At first New York receives it dubiously, on the principle that anything worth happening at all would naturally have happened in New York in the first place. But, after due thought, Klaw & Erlanger or the Shuberts decide that it is susceptible of a Broadway and 42d street setting and would therefore make a good musical comedy. No sooner said than done; in fact, sometimes even sooner than that. They hire Harry B. Smith to write a book around it, which he does some morning right after breakfast. The Words & Music Brothers do the songs, and it runs for nine months in one theatre and then goes on the road for two seasons, paying in royalties $18,000, which is exactly $17,999 25 more than the fellow out in Denver got.

"But the end is not yet. In the mean while it has crossed the seas to the Mother Country, where, after being carefully sterilized, deodorized, searched for concealed deadly points, disinfected and furnished with footnotes, a chart, a glossary and a set of plans and specifications, it becomes a regular English joke and appears in 'Punch.' It is then copied back on this side by 'The Evening Post.' Nine years later 'The Boston Transcript' prints it, with a credit to 'Harper's Weekly.' And then some hoary headed old doodle bug of an antiquarian crawls out from under a log in the woods and produces the proof to show that it was stolen from Charles Lamb, who got it from Aristophanes, who copied it from one of the Pyramids, but that its real origin is lost in the mists of prehistoric times.

"For, when all is said and done, real humor is even as bread cast upon the waters—it returns to you after many days with somebody else's name signed to it."

After having been married to him for twenty-three years, the wife of Maurice Hewlett, the novelist, now takes up the perilous vocation of giving flying lessons. While her husband is performing flights of rhetoric indoors, this plucky woman performs outdoor flights with an aeroplane.

"Developed your gold mine any as yet?"
"Sure. I started with desk room, and now I have a suite."—Kansas City Journal.